

AYVAZOV, Boris Viktorovich; PETROV, Sergey Mikhaylovich; KHAYRULLINA,  
Venera Rezepov'; YAPRYNTSEVA, Vera Grigor'yevna;  
YENISHEMLOVA, O.M., ved. red.

[Physicochemical constants of organic sulfur compounds] Fiziko-  
khimicheskie konstanty seraorganicheskikh soedinenii. Pod red.  
B.V.Aivazova. Moskva, Izd-vo "Khimiia," 1964. 279 p.

(MIRA 17:8)

16.8000 (1121,1132,1068)

27364

S/194/61/000/003/026/046  
D201/D306

AUTHOR: Yapshin, A.A.

TITLE: Basic properties and economic advantages in using  
a single armature converter for frequency conversion  
in control systems

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 3, 1961, 39, abstract 3 V314 (V sb. Avtomat.  
upravleniye, M., AN SSSR, 1960, 421-429)

TEXT: Smooth frequency control at the time of amplitude permits  
the realization of economic control of a.c. supplies. It is pro-  
posed that a single armature converter (ОП (OP)) be used as a fre-  
quency converter. The d.c. current produced by the controlled  
voltage is applies to the collector of the converter, and to the  
rings of it, an asynchronous motor (АД (AD)). With independent  
excitation of the converter the changes in the voltage which pro-  
duces the d.c. current, produce a change in the revolution speed of

Card 1/2

Basic properties...

27364  
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the converter, in its frequency and in the a.c. voltage. The mechanical characteristics are given of 2.8 and 28 kW motors, fed from the single armature converter. The characteristics are very pronounced. The required controlled a.c. frequency to amplitude ratio is easily obtained by varying the excitation current of the converter. The controlled asynchronous motor may also be of series type. The single armature converter may be used for starting, braking and reversing of asynchronous motors. It may also be used for the speed control of synchronous generators. The energy losses in the single armature converter are investigated and it is shown that these are small. 4 references. [Abstracter's note: Complete translation]

Card 2/2

YAPTEV, N. R., Eng.; ZAKHAROV, G. A.

Bearings (Machinery)

New design for tanks to be used in hardening ball and roller bearings. Podshipnik  
No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Unc1.

YAPUPOV, A.V., kand.tekhn.nauk

Small-sized fan for ventilation of first workings. Gor. zhur. no.7:  
74-75 Jl '58. (MIRA 11:9)

1.Giprorudmash.

(Mine ventilation) (Fans, Mechanical)

YARAFEEV, B. V.

BEL'KEVICH, P.I.; YARAFEEV, B.V.

New topokinetic equation. Vestsi AN BSSR no.4:115-122 J1-Ag '52.  
(Thermodynamics) (MLRA 7:8)

YARAFTYEV, B. V.

YARMOLENKA, N.P.; YARAFYEV, B.V.

Results of the work of the Seventh All-Union Conference on Problems of Chemistry and Physical Chemistry of High Molecular Compounds. Vestsi AN BSSR no.5:105-108 S-0 '52. (MIRA 7:8)  
(High molecular weight compounds)

YARAFYEV, B. V.

BYAL'KEVICH, P.I.; YARAFYEV, B.V.

Calculating energy of activation with the aid of a new topokinetic equation. Vestsi AN BSSR no.5:121-123 S-0 '52. (MIRA 7:8)  
(Thermodynamics).

KOMISSAROV, N.G., inzh.; YARAGINA, A.A., inzh.

Expanding transportations by the pusher methods Proizv.-tekhn.  
sbor. no.2:15-24 '59. (MIRA 13:10)  
(Towing)

YARAKHMEDOV, G.Ya.

A property of measurable functions. Vest. LGU 19 no.19:76-82 '64.  
(MIRA 17:11)

YARALIYEV, YARMET

Difficulties have been overcome. Neftianik 5 no.8:5-6 Ag '60.  
(MIRA 14:8)

1. Burovoy master brigady kommunisticheskogo truda neftepro-  
myslovogo upravleniya Karadagneft'.  
(Baku region--Oil well drilling)

KOLESNIKOV, G.S.; YARALOV, L.K.

Synthesis and study of heterochain polymeric peroxide initiators. Vysokom. soed. 7 no.3:551-556 Mr '65.  
(MIRA 12:7)

1. Institut elementoorganicheskikh soyedirenii AN SSSR i  
Moskovskiy khimiko-tehnologicheskiy institut imeni D.I.  
Mendeleyeva.

KOLESNIKOV, G.S.; YARALOV, I.K.

Block copolymers. Usp.khim. 34 no.3:454-487 Mr '65.

(MIRA 18:4)

1. Moskovskiy khimiko-tehnologicheskiy institut imeni Mendeleyeva.

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962120012-7

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962120012-7"

KOLESNIKOV, G.S.; YARALOV, L.K.

Synthesis and study of carbochain peroxide initiators.  
Vysokom. soed. 7 no.10:1807-1812 0 '65.

(MIRA 18:11)

1. Moskovskiy khimiko-tehnologicheskiy institut imeni D.I.  
Mendeleyeva i. Institut elementoorganicheskikh soyedineniy  
AN SSSR.

L 22538-66 EWT(m)/EWP(j)/T IJP(c) WW/RM  
ACC NR: AP6010117 (A) SOURCE CODE: UR/0190/66/008/003/0513/0518

AUTHOR: Kolesnikov, G. S.; Yaralov, L. K.

ORG: Moscow Chemical and Technological Institute im. D. I. Mendeleyev (Moskovskiy Khimiko-tehnologicheskiy institut); Institute of Organoelemental Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

TITLE: Polymerization of styrene initiated with polyoxyenanthic containing terminal peracidic groups and resulting in block copolymer formation

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 3, 1966, 513-518

TOPIC TAGS: styrene, block copolymer, polystyrene, polymerization, thermal decomposition, polymerization initiator

ABSTRACT: Heterocarbochain block copolymers consisting of polystyrene and  $\omega$ -oxyenanthic acid polyester blocks have been prepared. Radical styrene polymerization with macroradicals was initiated during the thermal decomposition of the terminal peracidic groups in synthesized polyenanthic. Properties of the prepared products were analyzed in solution and in condensed state. It was shown that the polyester block in the copolymer has a plasticizing effect on the polystyrene block and imparts to it the properties of modified polystyrene. Orig. art. has: 3 figures and 5 tables. [Based on authors' abstract.] [NT]

SUB CODE: 07/ SUBM DATE: 10Apr65/ ORIG REF: 006/ OTH REF: 001/  
Card 1/1 BLG UDC: 66.095.26+678.13+678.674+678.746

L 27821-66 EWT(m)/EWP(j)/T IJP(c) RM/NW

ACC NR: AP6012712

(A)

SOURCE CODE: UR/0190/66/008/004/0674/0680

AUTHOR: Kolesnikov, G. S.; Yaralov, L. K.

33

B

ORG: Moscow Institute of Chemical Technology im. D. I. Mendeleyev (Moskovskiy khimiko-tehnologicheskiy institut); Institute of Organoelemental Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)TITLE: Synthesis of block copolymers<sup>1</sup> using parachlorostyrene polymerization in the presence of a polyhydroxyenante with a terminal peracid groupSOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 4, 1966, 674-680TOPIC TAGS: block copolymer, polymerization initiator, polymerization

ABSTRACT: Heterocarbochain block copolymers consisting of a polyhydroxyenant and poly-p-chloro-styrene were synthesized. A peroxide derivative of a polyester of polyenantic acid was used as the polymerization initiator. Solution and solid state properties of the products obtained were analyzed. The presence of the polyester block in the block copolymer gives a plasticizing effect<sup>b</sup> thus increasing the tensile strength and elongation. Orig. art. has: 2 figures and 5 tables. [Based on authors' abstract.]

[NT]

SUB CODE: 11, 07/ SUBM DATE: 21Apr65/ ORIG REF: 003/ OTH REF: 001/

Card 1/1

PB

UDC: 66.095.26+678.674+678.74

2

L 32407-66 EmI(m)/EmP(j)/T IJP(c) 34/34/EM/EM  
ACC NR:AP6015051 (A) SOURCE CODE: UR/0190/66/008/005/0870/0875

AUTHOR: Yaralov, L. K.; Kolesnikov, G. S.

34  
B

ORG: Institute of Organoelemental Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR); Moscow Institute of Chemical Technology im. D. I. Mendeleyev (Moskovskiy khimiko-tehnologicheskiy institut)

TITLE: Synthesis and properties of polyacrylonitrile and polyoxenanth block copolymer

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 5, 1966, 870-875

TOPIC TAGS: block copolymer, polyacrylonitrile, polyoxenanth

ABSTRACT: Heterochain block copolymers with polyoxenanth and polyacrylonitrile blocks have been prepared for an investigation of their synthesis and properties. The polyoxenanth with terminal peracidic groups served as a macroinitiator. The block copolymer properties were analyzed in the solution and in the condensed state. The introduction of polyoxenanth into the chain decreases the softening temperature of the polyacrylonitrile. Orig. art. has: 1 figure and 4 tables. [NT]

SUB CODE: 11, 07/ SUBM DATE: 07May65/ ORIG REF: 007/ OTH REF: 001  
UDC: 514.64+678.13+678.674+678.745

Card 1/1 M95

GOGIBEDASHVILI, V.G., YARALOV, S.I., TAVAMAISHVILI, F.D.

Treatment of hypertension by inductotherapy (short-wave diathermy).  
Vop.kur.fizioter. i lech.fiz.kult 23 no.4:337-342 J1-Ag '58 (MIRA 11:8)

1. Iz Nauchno-issledovatel'skogo instituta kurortologii i fizioterapii  
Gruz.SSSR (dir. - kand.med.nauk V.G. Gogibedashvili).  
(HYPERTENSION)  
(DIATHERMY)

GOGIBEDASHVILI, V.G.; CHILINGARISHVILI, Ye.I.; YARALOV, S.I.

Treatment of hypertension with hydroaeroionization. Trudy  
Inst. klin. i eksper. kard. AN Gruz. SSR 8:253-256 '63.  
(MIRA 17:7)

1. Institut kurortologii i fizioterapii Gruzinskoy SSR, Tbilisi.

YARALOV, S.N., BLUVSHTEYN, G.M.

Tactics in dealing with foreign bodies of the larynx, trachea, and bronchi. Zhurn. ush., nos. 1 gorl. bol. 20 no. 5:72 S-0 '60.  
(MIRA 14:6)

1. Iz otdeleniya bolezney ukha, gorla i nosa (zav. - dotsent D.Ye. Rozengauz) Khar'kovskoy oblastnoy klinicheskoy bol'nitsy.  
(RESPIRATORY ORGANS—FOREIGN BODIES)

YARALOV, Yu. [Iaralov, IU.]

Concrete without cement. Nauka i zhyttia 12 no.2:34 F '63.  
(MIRA 16:4)

(Concrete blocks) (Stone, Artificial)  
(Silicates)

YARALOV, Yu. S.

11N/5  
884  
-Y2

ASHTARAK. MOSKVA, AKADEMKNIGA, 1947. 25, (3) p. DIAGRS. AND ILLUS. (SOK-  
ROVISHCHA ZODCHESTVA NARODOV SSSR) AT HEAD OF TITLE: ADADEVIYA ARKHITEKTURY  
SSSR. INSTITUT ISTORII I TEORII ARKHITEKTURY. "BIBLIOGRAFIYA": p. 27.

YARALOV, Yu.

YARALOV, Yu. Erevan. [Moskva], Izd. Akademii arkitektury SSSR, [1948]. 53 p.  
(Arkhitektura gorodov SSSR).

DLC: N41197.E7I3

SO: LC, Soviet Geography, Part II, 1951/Unclassified.

YARALOV, Yu.  
IU. IARALOV

POLUPANOV, S. and IU. IARALOV. ...Tashkent. S.Polupanov, IU. IArakov, Moskva,  
Izd-vo Akademii arkhitektury SSSR, 1949. 35 p., 33 plates, plans. (Arkhitektura  
gorodov SSSR).  
DLC: N41197.T3P6

SO: LC, Soviet Geography, Part II, 1951, Unclassified

*YARAILOV, Yu. S.*

BARANOV, N.V., red.; BURGMAN, V.V., red.; BURENIN, V.A., red.; BYLINKIN, N.P., red.; GALKIN, Ya.G., red.; GRIGOR'YEV, O.V., red.; OVSYANKIN, V.I., red.; SKRANTAYEV, B.O., red.; STRELTSKIY, N.S., red.; YARAILOV, Yu.S., red.; BARSKOV, I.M., spetsial'nyy red.; FRIDBERG, O.V., inzh., red. izd-va.

[Construction in the U.S.S.R., 1917-1957; proceedings of the third session of the Academy of Construction and Architecture of the U.S.S.R. commemorating the 40th anniversary of the Great October Socialist Revolution] Stroitel'stvo v SSSR, 1917-1957; trudy III sessii Akademii stroitel'stva i arkhitektury SSSR, posviashchennoi 40-iy godovshchine Velikoi Oktiabr'skoi sotsialisticheskoi revoliutsii. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1958. 750 p. (MIRA 11:5)

1. Akademiya stroitel'stva i arkhitektury SSSR. 2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Baranov). 3. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Burgman, Bylinkin). 4. Chlen-korrespondent Akademii nauk SSSR i deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Streletskiy)

(Construction industry) (Architecture)

*YARALOV-YARALYANTS, V.A.*  
YARALOV-YARALYANTS, V.A., starshiy nauchnyy sotrudnik.

Isolated dislocation of the navicular bone of the foot. Ortop.  
(MLRA 8:10)  
tavm. i protex. no.2:72-73 Mr-Ap '55.

1. Iz ortopedo-travmatologicheskoy kliniki Ukrainskogo tsentral'nogo nauchno-issledovatel'skogo instituta ortopedii i travmatologii (direktor instituta i zav.klinikoy-dotsent K.M.Klimov)

(ANKLE, dislocation  
navicular bone, isolated)

(DISLOCATION  
navicular bone of ankle, isolated)

YARALOV-YARALYANTS, V.A.

YARALOV-YARALYANTS, V.A., starshiy nauchnyy sotrudnik.

Sub talo dislocation of the foot. Ortop.travm. i protez. no.4:  
25-30 J1-Ag '55. (MLRA 8:10)

1. Iz Ukrainskogo tsentral'nogo nauchno-issledovatel'skogo  
instituta ortopedii i travmatologii (dir.-dots. K.M.Klimov)  
(DISLOCATIONS,  
foot, sub. talus)  
(FOOT, dislocations,  
sub talus)

YARALOV-YARALYANTS, Vardan Aleksandrovich, kandidat meditsinskikh nauk;  
BRODSKIY, A.P., redaktor; GITSHTKYN, A.D., tekhnicheskiy redaktor

[First steps for the physician in the treatment of accident cases]  
Pervaya vrachebnaia travmatologicheskaya pomoshch'. Kiev, Gos. med.  
izd-vo USSR, 1956. 201 p.  
(TRAUMATISM)

YARALOV-YARALYANTS, V.A., starshiy nauchnyy sotrudnik; TРЕБЕЛЕВА, С.А.

Industrial accidents in the construction of the Kakhovka Hydroelectric Power Station; their prevention and organization of accident relief.  
Ortop. travm. i protez. 17 no.6:43-46 N-D '56. (MLRA 10:2)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii i travmatologii v g.Kiyeve (dir. - dotsent K.M.Klimov) i Novo-Kakhovskoy gorodskoi bol'nitay (glavnnyy vrach - M.S.Podzolkin)

(WOUNDS AND INJURIES, prev. and control.

in construction of hydroelectric power station)

(INDUSTRIAL HYGIENE

control of inj. at construction of hydroelectric power station)

YARALOV-YARALYANTS, V.A., starshiy nauchnyy sotrudnik

Fractures of the scaphoid bone of the foot. Ortop., travn. i  
protez. 18 no.5:81-82 8-0 '57. (MIRA 12:9)

1. Iz Ukrainskogo tsentral'nogo nauchno-issledovatel'skogo  
instituta ortopedii i travmatologii (dir. K.M.Klimov [deceased]).  
(SCAPHOID BONE--FRACTURE)

YARALOV-YARALYANTS, V.A., starshiy nauchnyy sotrudnik

Characteristics of farm accidents and the organization of trauma-  
tological aid. Ortop.travn. i protez. 20 no.1:57-63 Ja '59.  
(MIRA 12:3)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii i  
travmatologii v g. Kiyev'e (nauchnyy rukovoditel' - chlen-korrespon-  
dent AMN SSSR prof. F.R. Bogdanov).

(WOUNDS AND INJURIES  
traumatol. in rural areas in Russia (Rus))

(RURAL CONDITIONS  
same)

YARALOV-YARALYANTS, V.A., starshiy nauchnyy sotrudnik

Fractures of the calcaneus and late results of treatment. Ortop.,  
travm. i protez. 20 no.12:6-12 D '59. (MIRA 13:5)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii  
i travmatologii v gorode Kiyev (i.o. direktora - N.N. Musnenko).  
(CALCANEUS fracture & dislocation)

KRAMAROV, I.A., dotsent [deceased]; KLIMOV, K.M., dotsent [deceased]; YARALOV-YARALYANIS, V.A. (Kiyev, ul. Saksaganskogo, d.37, kv.17)

Peculiarities of the treatment of anklebone fractures. Vest. khir. 83 no.7:69-73 J1 '59. (MIRA 12:11)

1. Iz kafedry ortopedii i travmatologii (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent I.A.Kramarov) Kiyevskogo instituta usovershenstvovaniya vrachey i Kiyevskogo nauchno-issledovatel'skogo instituta ortopedii i travmatologii (dir. - N.N.Musiyenko).

(ANKLEBONE--FRACTURE)

YARAILOV-YARAIKANTS, Vardan Aleksandrovich, kand.med.nauk; BRODSKIY, A.F.,  
red.; GITSHTEYN, A.D., tekhnred.

[Medical first aid in accidents] Pervaia vrachebnaia travmato-  
logicheskaiia pomoshchi'. 2. izd., ispr. i dop. Kiev, Gos.med.  
izd-vo USSR, 1966. 281 p. (MIRA 1412)  
(FIRST AID IN ILLNESS AND INJURY)  
(MUSCULOSKELETAL SYSTEM--ACCIDENTS)

ALEKSEYENKO, I.P., dotsent; YARALOV-YARALYANTS, V.A., starshiy nauchnyy  
strudnik

Status of orthopedic traumatological aid and measures for its  
improvement in Provinces of the Western Ukraine. Ortop. travm.  
i protez. 21 no. 9:38-44 S '60. (MIRA 13:12)

1. Iz Kiyevskogo nauchno-issledovatel'skogo instituta ortopedii i  
travmatologii (dir. - dotsent I.P. Alekseyenko).  
(UKRAINE, WESTERN-ORTHOPEDICS)

REZNIK, Semen Denisovich, kand. med. nauk; YARALOV-YAROLYANTS,  
V.A., red.; ZAPOL'SKAYA, L.A., tekhn. red.

[Chronic traumatic bursitis in the knee and elbow joints]  
Khronicheskie travmatische bursity kolennykh i loktevykh  
sustavov. Kiev, Gosmedizdat USSR, 1962. 106 p.

(MIRA 16:7)

(BURSITIS) (KNEE--DISEASES) (ELBOW--DISEASES)

YARALOV-YARALYANTS, V.A., starshiy nauchnyy sotrudnik (Kiyev, ul.  
Saksaganskogo, d.37, kv.17)

Analysis of industrial injuries among agricultural machine operators  
in Kiev Province. Ortop., travm. i protez. 24 no.10:55-60 O '63.  
(MIRA 17:5)

1. Iz Ukrainskogo instituta travmatologii i ortopedii v Klyeve  
(dir. - dotsent I.P. Alekseyenko).

YARALOV-YARALYANTS, Varden Aleksandrovich, kand. med. nauk;  
BRUDSKY, A.F., ref.

[Traumatological first aid by the doctor] Pervaya vra-  
chebnaya travmatologicheskaya pomoshch'. Izd.3., ispr.  
1 dop. Kiev, Zaporozh'ya, 1964. 293 p. (MIRA 18:1)

BOGDANOV, F.R., prof. (Kiyev, Vladimirskaia ulitsa, d.9, kv. 10);  
YARALOV-YARALYANTS, V.A., starshiy nauchnyy sotrudnik

Current methods of treating fractures of the bones of the  
foot. Ortop. travm. i protez. 24 no.5:3-10 My '63.  
(MIRA 17:9)

1. Iz Ukrainskogo instituta ortopedii i travmatologii v Kiyeve  
(dir.- dotsent I.P. Alekseyenko). 2. Chlen-korrespondent AMN  
SSSR (for Bogdanov).

KNYSH, I.T., dotsent; YARALOV-YARALYANTS, V.A., kand. med. nauk (Kiyev)

"Lesions of the elbow and the basic principles of their treatment" by O.O. Korzh, V.S. Kostrykov. Reviewed by I.T. Knysh,  
V.A. IAralov- IAraliats. Ortop., travm. i protez. 25 no.4:  
(MIRA 18:1)  
73-75 Ap '64

YARALOVA, P.V.

Experimental preservation of skin by the method of rapid and deep  
freezing. Genat. i perel. krovi 1:161-163 '65.

(MIRA 18:10)

1. Kiyevskiy institut perelivaniya krovi.

GORYAGA, G.I.; KUZOVNIKOV, A.A.; RUBAN, A.A.; YARAMYSHEV, G.S.

Stabilization of a brush discharge. Vest. Mosk. un. Ser. 3:  
(MIRA 19:1)  
Fiz., astron. 20 no.6:80-82 N-D '65.

1. Kafedra molekulyarnoy fiziki i kafedra elektroniki Moskovskogo  
gosudarstvennogo universiteta. Submitted Feb. 3, 1965.

ACC NR: AP7001957

SOURCE CODE: UR/0120/66/000/006/0167/0168

AUTHOR: Butslov, M. M.; Korn, M. Ya.; Solov'yev, N. N.; Yaramyshev, G. S.

ORG: Institute of Epidemiology and Microbiology, AMN SSSR (Institut epidemiologii i mikrobiologii AMN SSSR)

TITLE: Outfit for color microphotograph by means of an electron-optical image-brightness intensifier

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1966, 167-168

TOPIC TAGS: microphotography, image intensifier

ABSTRACT: An outfit is briefly outlined which consists of a Soviet-made ML-2 luminescent microscope, an electron-optical light intensifier, and a "Konvas" movie camera; the outfit is intended for studying biological objects. By means of sequential alternate-frame dichroic filtering, the color microphotographing (stills and moving) of biological objects from the intensifier screen is performed. The light filters are changed in synchronism with the frames. The outfit permitted cutting down the exposure time by 2-3 orders of magnitude and permitted centraffer micro-filming of live objects on black-and-white films. Orig. art. has: 3 figures.

SUB CODE: 09, 14 / SUBM DATE: 15Mar66 / ORIG REF: 003

UDC: 778.142:778.6:578.08

Card 1/1

YARAMYSHEV, I., general-major in the radio-technical slushby

The results of an overall inspection. Av. 1 Kras. 17 no. 2:66-68  
(MIRA 18:4)  
F '65.

YARANTSEV, Nikolay Nikolayevich; STRYZHKOVA, N.I., red.; GALAKTIONOVA,  
Ye.N., tekhn. red.

[Automobile transportation of liquefied oxygen and other industrial  
gases in bottles] Avtomobil'nye perevozki ballonov so s'zhatym kislo-  
rodom i drugimi tekhnicheskimi gazami. Moskva, Avtotransizdat,  
(MIRA 14:9)  
1961. 20 p.

(Liquefied gases—Transportation)  
(Transportation, Automotive—Safety measures)

YARANTSEV, Nikoley Nikolayevich; SHUMILOVA, Ye.M., red.; BODANOVA,  
A.P., tekhn. red.

[Transportation by truck of long-rolled ferrous metal products]  
Avtomobil'nye perevozki dlinnomernogo prokata chernykh metallov.  
Moskva, Avtotransizdat, 1962. 40 p. (MIRA 15:6)  
(Industrial power trucks)  
(Steel bars--Transportation)  
(Sheet metal--Transportation)

VARANTSEVA, Ye.P.; KATS, A.M.; IONAS, V.M.

Rationalization of the work of Moscow drugstore employees. Apt.  
delo 9 no. 4:56-60 Jl-Ag '60. (MIRA 13:8)

1. Nauchno-issledovatel'skaya aptechnaya stantsiya Moskovskogo  
gorodskogo aptechnogo upravleniya.  
(MOSCOW--DRUGSTORES) (WORK, METHOD OF)

SIDORKOV, A.M.; PARKHOMENKO, G.I.; KOROLEVA, M.G.; YARANTSEVA, Ye.P.

Review of T.I.Tol'tsman's book "Textbook on the organization  
of pharmaceutical service." Apt. delo 12 no. 5:86-87 S-0'63  
(MIRA 16:11)

YARANTSEVA, Ye.P.; KATS, A.M.

Mechanization and rationalization of work at the Moscow pharmacies.  
Apt. delo 13 no.1:58-63 Ja-F '64. (MIRA 17:4)

1. Nauchno-issledovatel'skaya aptechnaya stantsiya Moskovskogo  
gorodskogo aptechnogo upravleniya.

YARANOV, D.

Seismic area distribution in Bulgaria. Nauch. dokl. vys. shkoly;  
geol.-geog. nauki no.3:30-36 '58. (MIRA 12:1)

1.Gosudarstvennyy universitet g. Sofiya, Narodnaya Republika  
Bulgarii. (Bulgaria--Seismology)

*YARANTSEV*

SOV/137-58-9-19088

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 136 (USSR)

AUTHOR: Yarantsev, M.P.

TITLE: An Investigation of Change in the Dimensions and Mechanical Properties of Sized Steel During Straightening on a Roll Straightener (Issledovaniye izmeneniya razmerov i mekhanicheskikh svoystv kalibrovannoy stali v protsesse pravki na rolikovoy pravil'noy mashine)

PERIODICAL: V sb.: Prokatn. i trubn. proiz-vo. Moscow, Metallurgizdat, 1958, pp 378-384

ABSTRACT: Experience shows that an increase in diameter (camber) occurs during the straightening of sized metal. The magnitude of this phenomenon depends upon: a) The C content of the steel; b) the rate at which the rolls of the straightener approach each other, as determined by the curvature of the rolls; c) the structure of the steel; d) the number of bends performed in straightening; e) the degree of reduction in drawing; f) the entry angle of the die through which the metal was drawn. It follows from these data that the greater the reduction of the steel in rolling the less the camber that will obtain on subsequent straightening.

Card 1/2

SOV/137-58-9-19088

An Investigation of Change in the Dimensions and Mechanical Properties (cont.)

As the diameter of the sized steels become smaller, the absolute camber produced during straightening is diminished but slightly, so that the relative magnitude of change in the dimensions of the rod after straightening undergoes a considerable increase. After the straightening of grades 45 and 50 steels, a pronounced reduction in  $\sigma_b$  is observed, accompanied by an increase in ductility. Also observed is a tendency toward a decrease in the hardness of the sized metal. After steel containing little C is straightened, no change in mechanical properties is observed. The greater the angle of entry of the die, the greater the camber produced upon straightening in metals that have undergone identical degrees of reduction in drawing.

B.Ts.

1. Steel--Processing
2. Rolling mills--Performance
3. Dies--Applications

Card 2/2

YARANTSEV, N.N., starshiy inzhener; POMIN, A.V., otv.za vypusk; MAL'KOVA, N.V., tekhn.rsd.

[Operation of the "Ikarus-60" motorbus; practices of the 31st motor transport column in Leningrad province] Eksploatatsiya avtobusov "Ikarus-60"; iz opyta 31-i avtokolonne Leningradskoi oblasti. Moskva, Nauchno-tekhn.izd-vo avtotransp. lit-ry, 1958. 27 p. (MIRA 12:6)

1. Moscow. Nauchno-issledovatel'skiy institut avtomobil'nogo transporta. 2. Leningradskiy filial Nauchno-issledovatel'skogo instituta avtomobil'nogo transporta (for Yarantsev).  
(Motorbuses)

PARKHOMENKO, G. I., YARANTSEVA, Ye., MIRLIN, N.D., kand. farmatsevticheskikh nauk  
(Leningrad)

"Organization of the pharmacy system" by A. I. Shimanko, A. K. Mel'nicenko.  
Reviewed by G. I. Parkhomenko, E. I Arantseva, N.D. Mirlin. Apt. delo  
7 no.4:92-95 Jl-Ag '58 (MIRA 11:8)

1. Zamestitel' predsedatelya Moskovskogo nauchno-farmatsevticheskogo  
obshchestva (for Parkhomenko). 2 Zamestitel' predsedatelya sektsii  
planirovaniya i uschestva Moskovskogo nauchno-farmatsevticheskogo  
obshchestva (for Yarantseva).  
(PHARMACY)

PARKHOMENKO, G.I.; YARANTSEVA, Ye.P.; KATS, A.M.; Prinimala uchastive  
CHERTKOVA, A.N.

Prescriptions at the drugstores of Moscow. Apt. delo 14 no. 4:  
58-61 J1-Ag '65 (MIRA 19:1)

1. Moskovskoye gorodskoye aptechnoye upravleniye. 2. Nauchno-  
issledovatel'skaya aptechnaya stantsiya Moskovskogo gorodskogo  
aptechnogo upravleniya (for Chertkova).

LOPATIN, P.V.; KATS, A.M.; YARANTSEVA, Ye.P.; FEDOROVA, T.M.; GORSKAYA, L.V.

Experimental study of the disinfection of prescriptions and paper  
by means of ultraviolet irradiation. Apt. delo 14 no.6:60-64  
N-D '65. (MIRA 18:12)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina  
meditsinskogo instituta imeni I.M.Schenova; Nauchno-  
issledovatel'skaya aptechnaya stantsiya Moskovskogo gorodskogo  
aptekupravleniya i Sanitarno-epidemiologicheskaya stantsiya  
Moskvy.

CHECHERNIKOV, V.I.; PECHENNIKOV, A.V.; KALITIN, V.I.; YAREMBASH, Ye.I.

Magnetic properties of single and polycrystalline praseodymium  
diselenide  $\text{PrSe}_2$ . Zhur.eksp. i teor.fiz. 49 no.5:1399-1401 N '65.  
(MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet.

L 15203-66 EWT(m)/EWP(w)/ETC(F)/EWG(m)/T/EWP(t)/EWP(b) IJP(c) RDW/JD/JE  
ACC NR: AP6001230 SOURCE CODE: UR/0363/65/001/012/2138/2139

AUTHOR: Chechernikov, V. I.; Pechennikov, A. V.; Yarembash, Ye. I.; Kalitin, V. I.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet); Institute of General and Inorganic Chemistry im. N. S. Kurnakov, Academy of Sciences, SSSR (Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR)

TITLE: Magnetic properties of praseodymium selenides

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 12, 1965, 2138-2139

TOPIC TAGS: praseodymium compound, selenide, magnetic moment, magnetic susceptibility, Curie point

ABSTRACT: The magnetic properties of the selenides  $\text{PrSe}$ ,  $\text{Pr}_3\text{Se}_4$ ,  $\text{Pr}_2\text{Se}_3$ , and  $\text{Pr}_4\text{Se}_7$ , were studied. The magnetic susceptibility was measured in the  $80 - 800\text{K}$  range. Above room temperature, the measurements were made in a  $10^{-4}$  mm Hg vacuum to prevent oxidation. Fig. 1 shows the reciprocal magnetic susceptibility versus temperature. The Curie-Weiss law  $X = C/(T - \theta_p)$  was obeyed by all the samples. If the paramagnetic Curie point  $\theta_p$  is determined from the experimental data, and the effective atomic magnetic moment  $P_p$  is then calculated, it is found that these values change in proportion to the praseodymium content. The magnetic moments correspond to the magnetic moment of  $\text{Pr}^{3+}$  ion, i.e.,  $3.3\mu_B$ . The Curie point  $\theta_p$  is positive in  $\text{Pr}_3\text{Se}_4$ ,  $\text{Pr}_2\text{Se}_3$ , and  $\text{Pr}_4\text{Se}_7$ , and negative in  $\text{PrSe}$  and  $\text{PrSe}_2$ ; this is due to the appearance of antiferromagnetic interaction in the latter two compounds. It is

Card 1/2

UDC: 546.656'231:538.11

L 15203-66

ACC NR: AP6001230

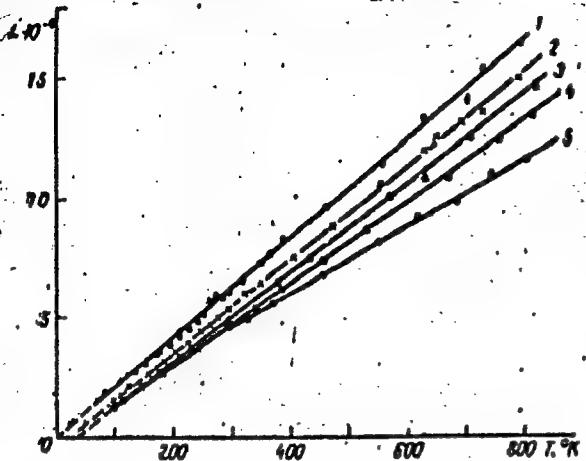


Fig. 1. Temperature dependence of  
1/X of praseodymium selenides:  
1 -  $\text{PrSe}_2$ ; 2 -  $\text{Pr}_4\text{Se}_7$ ; 3 -  $\text{Pr}_2\text{Se}_3$ ;  
4 -  $\text{Pr}_3\text{Se}_4$ ; 5 -  $\text{PrSe}$

concluded that the magnetic properties of praseodymium selenides are chiefly determined by the 4f electrons, which are in a localized state. Orig. art. has: 1 figure and 1 table.

SUB CODE: 07,11,20 / SUBM DATE: 12Jul65 / ORIG REF: 003 / OTH REF: 003

PC  
Card 2/2

YARAS, I.I. (Moskva)

Delayed devitalization of the pulp. Stomatologija 35 no.1:18-19  
Ja-F '56. (MIRA 9:6)

1. Iz polikliniki "Medpomoshch"  
(TEETH--DISEASES)

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962120012-7

YARAS, I.I. (Moskva)

Classification of periodontitis. Stomatologija 35 no.3:16 My-Je '56.  
(MOUTH--DISEASES) (MIRA 9:9)

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962120012-7"

YARAS, I.I. (Moskva)

Use of plastic teeth. Stomatologija 37 no.4:70-71 Jl-4g '58  
(MIRA 11:9)  
(DENTAL PROSTHESIS)

L 1996-66 EWT(m)/EPF(c)/EPF(n)-2/EWG(m) WH

ACCESSION NR: AP5014734

UR/0201/65/000/001/0008/0017

AUTHORS: Krasin, A. K.<sup>55</sup>; Navumaw, V. A.<sup>55</sup> (Naumov, V. A.); Savushkin, B.<sup>26</sup>  
I. A.; Stralkow, R. I.; Yarashevich, A. I.<sup>22</sup>  
<sup>55</sup>

TITLE: Physical characteristics of the type IRT-2000 swimming-pool  
research reactor with loop channels

SOURCE: AN BSSR. Izvestiya. Seriya fiziko-tekhnicheskikh nauk,  
no. 1, 1965, 8-17

TOPIC TAGS: nuclear research reactor, nuclear reactor component,  
nuclear reactor technology

ABSTRACT: The article describes a modified standard reactor which  
went into operation at the Institute of Heat and Mass Exchange of  
the Academy of Sciences of the Belorussian Republic in May 1962.  
The original design was described by V. V. Goncharov et al. at the  
second Geneva Conference in 1958 (Trudy II Mezhdunarodnoy konferen-

Card 1/3

L 1996-66

ACCESSION NR: AP5014734

4

tsii po mirnomu ispol'zovaniyu atomnoy energiee, v. 2, Atomizdat, 1959) and elsewhere. Since the original design made no provision for test loops, the authors describe the changes in the construction of the individual units of the reactor at the location where the loop was installed, the differences arising in the physical characteristics, experimental investigations of the physical characteristics, experimental investigations of the physical characteristics of the modified reactor, including the new critical experiments (performed by Yu. G. Nikolayev of the I. V. Kurchatov Institute of Atomic Energy), and the main results. The latter have shown that installation of a loop channel with approximately 3 kg of steel is feasible, and that optimal materials surrounding the loop channel can be chosen so as to make possible either a maximum run or a maximum flux of thermal neutrons. At a power of 2000 kW the attainable neutron flux is  $10^{14}$  neutron/cm<sup>2</sup> sec. Orig. art. has: 5 figures and 2 tables.

Card 2/3

L 1996-66.

ACCESSION NR: AP5014734

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NR REF SOV: 005 OTHER: 004

Card 393

34722  
S/137/62/000/002/115/1<sup>h</sup>  
A060/A101

11710  
AUTHORS:

Badzyaka, M. M., Loyka, Yu. M., Yarashevich, G. B.

TITLE:

Investigation of the process of tempering steel 40X (40Kh) with  
the use of heating by high-frequency currents

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1962, 101, abstract 21687  
("Izv. AN BSSR. Ser. fiz-tekh. n.", 1961, no. 2, 132 - 135, Belo-  
russian)

TEXT: An investigation was carried out upon the main parameters of high-  
frequency heating (temperature and heating rate  $V_H$ ) upon the hardness, residual  
stresses, domain size, and microstructure of hardened steel 40Kh after high-  
frequency induction tempering at 100 - 800°C. The specimens were hardened in  
water after HF induction heating up to 930°C at a heating rate  $V_H$  of 30 deg/sec,  
and another lot of specimens - after furnace heating at 930°C with soaking for  
30 min. At HF induction heating the heating was carried out at a  $V_H$  of 30 deg/sec,  
300 deg/sec. In parallel with this one carried out tempering in a furnace with  
soaking for one hour at the given temperature. The  $V_H$  was determined from heat-  
ing oscillograms. It was established that tempering by 100°C in all cases leads

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S/137/62/000/002/115/144  
A060/A101

Investigation of the process of...

to some improvement of hardness. As the temperature is raised further the tempering hardness is gradually reduced. An increase in the  $V_H$  at a given tempering temperature leads to an increase of hardness. When one tempers up to  $300^{\circ}\text{C}$  the difference in the hardness of the specimens tempered at various  $V_H$  is insignificant, testifying to the rapid occurrence of the processes of conversion of tetragonal martensite into the cubic modification, the initial stage of carbide precipitation and the decomposition of the residual austenite. At tempering temperatures of  $300 - 400^{\circ}\text{C}$  a decrease of hardness under high-frequency induction heating is somewhat slowed down, in particular for  $V_H$  of  $300 \text{ deg/sec}$ , testifying to a protraction of the decomposition of the residual austenite. As one further raises the tempering temperature the influence of  $V_H$  upon the hardness increases. Thus, in order to attain  $R_C 38$  at  $V_H=30 \text{ deg/sec}$ , heating up to  $550^{\circ}\text{C}$  is required, whereas at  $V_H = 300 \text{ deg/sec}$  - up to  $600^{\circ}\text{C}$ . Furnace tempering requires heating up to  $470^{\circ}\text{C}$ . The structure of troostite tempered by HF induction heating is obtained after tempering at  $500^{\circ}\text{C}$ , sorbite structure - after heating up to  $700^{\circ}\text{C}$ . The structures tempered by HF induction heating have a martensitic-type orientation. After HF induction heating at  $800^{\circ}\text{C}$  the martensitic orientation is lost; however, the transformation of the pearlite into austenite still does not occur in a great measure. The residual stresses of the second kind after HF induction tempering

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Investigation of the process of...

S/137/62/000/002/115/144  
A060/A101

are greater than after furnace tempering to the same temperature. At one and the same hardness the magnitude of residual stresses is independent of the  $V_H$ . The domain size increases with the increased temperature or with a decrease of  $V_H$ , the temperature remaining constant. In furnace tempering the noticeable increase in domain size begins at 300°C, in HF induction tempering - at 500°C. The  $V_H$  has a noticeable effect upon the domain size starting from 300°C and above. There are 8 references.

M. Shapiro

[Abstracter's note: Complete translation]

Card 3/3

S/201/03/000/001/007/007  
D234/D308

AUTHORS: Badzyaka, M.M. and Yarashevich, G.B.

TITLE: The effect of the rate of heating on the reversal of physico-mechanical properties of cold-deformed iron

PERIODICAL: Akademiya navuk Byelaruskay SSR. Vyestsi, Syeryya fizika-tehnichnykh navuk, no. 1, 1963, 103-110

TEXT: The authors investigated the effect of induction heating energy parameters on the change in the crystal structure and mechanical properties of armco-iron (99.9% Fe). The rates of heating were 30 and 300°C/sec. The reversal is sufficiently complete without isothermal heating, which suggests the possibility of low-temperature annealing during induction heating. The higher rate of heating produces a larger degree of deformation and a smaller growth in coherent scattering blocs. Plastic characteristics change appreciably during reversal, the change in hardness is small. There are 4 figures and 1 table.

Card 1/1

YARASOV, M.M.

Stopcock for the KHA-1 universal filling machine. Kons. i sv.  
prom. 14 no.1:21 Ja '59. (MIRA 12:1)

1. Isfarinskiy konservnyy zaved.  
(Canning and preserving--Equipment and supplies)

5 (2,3)

AUTHORS: Yaravchenko, N. N., Shemanina, V. N.,  
Gaziyeva, G. B. SOV/79-29-3-39/61TITLE: Synthesis of Hexafluoro-Dimethyl-Diselenide From the Salts of  
Trifluoro Acetic Acid and Some of Its Properties (Poluchenije  
geksaftordimetildiselenida iz soley trifloruksusnoy kisloty i  
nekotoryye yego svoystva)PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 3, pp 942 - 945  
(USSR)ABSTRACT: Recently, the decarboxylation reaction of the salts of the  
fluorinated organic acids is frequently used in the synthesis  
of organofluorine compounds according to scheme 1 (Refs 1,2).  
Yet no organofluorine compounds of sulfur are formed in the  
decarboxylation of trifluoroacetates in the presence of sulfur,  
but  $SO_2$ ,  $Ag_2S$  and the anhydride of the trifluoro acetic acid  
(Ref 3, Scheme 2). In connection with the fact that selenium  
is an analogy of sulfur, it appeared to be little likely that  
in the abovementioned way organofluorine compounds of selenium  
could be obtained. For this reason the decarboxylation of the  
salts of fluorinated acids in the presence of Se had hitherto

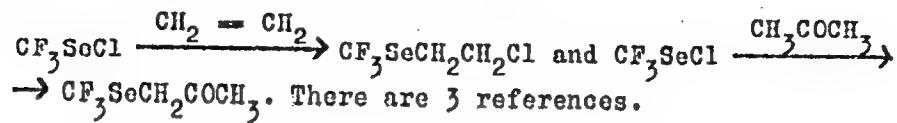
Card 1/3

Synthesis of Hexafluoro-Dimethyl-Diselenide From the SOV/79-29-3-39/61  
Salts of Trifluoro Acetic Acid and Some of Its  
Properties

not been tried by scientists. The authors found that on heating the mercury or silver salts of the trifluoro acetic acid with selenium a hexafluoro-dimethyl-diselenide is unexpectedly formed  $(CF_3CO_2)_2Hg \xrightarrow{Se} CF_3SeSeCF_3$ . In this connection the reaction products with liquid air have to be kept back as otherwise the diselenide would be carried along by the resulting  $CO_2$  (See also Refs 1 and 2). Five further transformation products are described:  $CF_3SeCl$ ,  $CF_3SeCl_3$ ,  $CF_3SO_2H$ ,  $CF_3SeHgCl$ ,  $CF_3SeHgSeCF_3$ . The hexafluoro-dimethyl-diselenide synthesized by the authors was cleaved by means of chlorine and bromine according to the scheme  $CF_3SeSeCF_3 \xrightarrow{Hal_2} CF_3Se Hal$ . The trifluoroalkyl-selenium halides proved to be, as was expected, highly reactive compounds, i.e. according to the reaction schemes:  $CF_3SeCl \xrightarrow{KCN} CF_3SeCN$ ,

Card 2/3

Synthesis of Hexafluoro-Dimethyl-Diselenide From the SOV/79-29-3-39/61  
Salts of Trifluoro Acetic Acid and Some of Its  
Properties



SUBMITTED: February 7, 1958

Card 3/3



YARBA, U.A.

TYPE

8/06/80/08/08/004/04/04/04

24690

ATTACH:

MORSE, V. M.

SILVERMAN, J. A.

WILSON, D. E.

TITLE:

Influence of Interaction of p-p Proton with Proton and Neutron

SUBJECT:

Proton - Proton interaction at 4 GeV/c energy

REF ID:

Vol. 36, No. 4, pp. 1345 - 1348

PUBLISHER:

Journal of High Energy Physics

PUBLICATION:

The authors received 250-elastic interactions, via 140 pp.

and 100 pp. reactions on emulsion chamber irradiated with pion-proton  
collisions. The experimental data were obtained at the Institute of High Energy Physics, Dubna, Institute of Nuclear Physics, Novosibirsk, and the Institute of High Energy Physics, Dubna, Institute of Nuclear Physics, Novosibirsk. For the purpose of determining the angular distributions of the secondary particles, measurements of the multiple Coulomb scattering and ionization were carried out. The results obtained are briefly discussed. The angular distributions of the charged pions and protons in the near end-on (0.5°) and

CART 1/3

other reactions are analyzed and the secondary particle distributions are compared to the assumptions of the statistical theory. The authors of the article present the angular distributions of secondary particles in the case of the same proton and pion numbers (0 and 1), summing up the contributions of the laboratory (statistical theory) and the theoretical (multiple Coulomb scattering and ionization) over carried out. The results obtained are briefly discussed. The angular distributions of the charged pions and protons in the near end-on (0.5°) and

$\theta = 0.51 \pm 0.06$ . Fig. 2 shows the momentum distributions of protons and charged pions from  $p\bar{p}$  interactions. It is shown that the pion spectrum with respect to the theoretical distribution is shifted toward smaller and the proton spectrum toward greater momenta. The average momenta in the case are calculated to be  $\langle p \rangle = (1.25 \pm 0.1)$   $\text{GeV}/c$  and  $\langle p \rangle = (0.42 \pm 0.1)$   $\text{GeV}/c$ . The statistical theory gives  $\langle p \rangle = 0.79$   $\text{GeV}/c$  and  $\langle p \rangle = 0.33$   $\text{GeV}/c$ . The primary proton in  $p\bar{p}$  collisions loses (15-25)% of

CART 2/3

its energy to the pion production (the statistical theory gives a value of 50%). Fig. 3 shows the angular distributions of the charged secondary particles taking the correction for geometry into account. The angular distributions (pp interaction) are asymmetric in the case. The angular distributions of the secondary particles from scattering are asymmetric, which cannot be explained by the statistical theory. The authors thank Professors I. I. Kitaev and Professor V. P. Belyaev for their interest in this investigation. There are 7 figures and 7 references.

6 Soviet and 1 British.

ASSOCIATION: Organization Institute JINR (Joint Institute of Nuclear Research)

SUBJECT: January 21, 1960

CARD 3/3

BATUSOV, Yu.A.; BUYNATOV, S.A.; SIDOROV, V.M.; YARBA, V.A.

Determining the cross section of recharge of a  $\bar{\pi}$ -meson on a  $\bar{\pi}$ -meson from the analysis of the reaction  $\bar{\pi} + p \rightarrow \bar{\pi} + \bar{\pi} + \text{nat}$  an energy of 290 Mev. Zhur. eksp. i teor. fiz. 39 no.2:506-509 (MIRA 13:9) Ag '60.

1. Ob"yedinennyi institut yadernykh issledovaniy.  
(Mesons)

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**pp. 72-73**

**Card 1/4**

**Text:** The first results obtained from the investigation under review were submitted by J. M. Franklin in July, 1959, at the Conference for the Physics of High-Energy Particles held at Kiev. The authors of the present paper wanted to study the properties of the energy characteristics of secondary particles in the reactions  $\pi^- + p \rightarrow \pi^- + p$  at an energy of 200 Mev or the primary pions. The angular and azimuthal distributions obtained are compared with the statistical theory by Linsley and Sturzaker. The reaction products are produced in the nucleon-nucleon collisions in a nuclear emulsion and the anisotropies of the laboratory  $\pi$ -ray yields are compared with the theoretical predictions of the Institute of Nuclear Physics of the Institute of Nuclear Physics of the

**Joint Institute of Nuclear Research.**—1920 interactions of primary mesons were reported in the pion-nucleus scattering, and in the further analysis only such cases were selected as exhibited only two secondary mesons among the secondary charged particles. 155 interactions satisfied these conditions and in them, the authors measured the energy of the secondary mesons and the angle of their emission. As estimates of the reaction areas  $\sigma_{\text{eff}}$ ,  $\sigma_{\text{tot}}$ , which reference was made to a paper by K. S. Boulton and K. V. Bodichine, yielded a value of  $(0.61 \pm 0.15)$  millibars. Fig. 1 is a graph depicting the secondary distribution of secondary particles in the studied reaction for  $\pi^-$  pions and neutrons. In the same diagram, measurements were made compared with the curves calculated after the relativistic theory and the isovector model. Theory and experiment agree within the limits of error. The diagram of Fig. 2 shows the energy distribution of angular distribution for  $\pi^-$  mesons,  $\pi^-$  mesons, and neutrons. Here, the anisotropic and anisotropic angular distribution of the reaction products does not agree with the predictions of the statistical theory. It follows from the

100

analysis of experimental data that the most recent distribution in the orientation of all angles in the center-of-mass system, constitutive of the statistical theory for the Ising model, is not a graph depicting the angular distributions among the moments of secondary particles in the center-of-mass system from 100 experiments. Brief mention is made of the explanation of the asymmetry of the angular distribution of presents, which contradicts the statistical theory. The authors of all of the Ising model by Strel'tsev and Lalevash. The authors thank Professor V. I. Lepilov, and V. N. Ryndin for carrying out the number of problems. There are 3 figures and 16 references: 9 devoted and 10 American.

1986-1987. The first year of the new system was a success.

Joint Institute of Nuclear Research

卷之三

Formulas of Charged Neons by a "Meissner  
Field" on Theory of 700 Ne on Extraterrestrial  
Planets

卷之三

SEARCHED: INDEXED: SERIALIZED: FILED: MARCH 3, 1960

卷之三

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001962120012-7"

88467

S/056/60/039/006/060/063  
B006/B063

24.6900

AUTHORS: Batusov, Yu. A., Bunyatov, S. A., Sidorov, V. M., Yarba, V.A.TITLE: Production of Charged Mesons by 245-Mev  $\pi^-$  Mesons on HydrogenPERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,  
Vol. 39, No. 6(12), pp. 1850-1852

TEXT: This "Letter to the Editor" presents preliminary results of a study of the reaction  $\pi^- + p \rightarrow \pi^+ + \pi^- + n$ , in which the initial meson had an energy of 245 $\pm$ 15 Mev. The experiments were performed in the synchrocyclotron of the Laboratoriya yadernykh problem OIYAI (Laboratory for Nuclear Problems of the Joint Institute of Nuclear Research). A total of 32 events have been recorded. The cross section for the reaction was found to be  $0.10 \pm 0.04$  mb. The meson production near the threshold can be explained according to A. A. Ansel'm and V. N. Gribov who have shown that the energy dependence of the cross section depends on particle interaction in the final state and is determined by the amplitudes of the charge-exchange reactions  $\pi^+ + \pi^- \rightarrow \pi^0 + \pi^0$  and  $\pi^+ + n \rightarrow \pi^0 + p$ . The angular and

Card 1/4

88467

Production of Charged Mesons by 245-Mev  
 $\pi^-$  Mesons on Hydrogen

S/056/60/039/006/060/063  
B006/B063

momentum distributions of the secondary particles in the center-of-mass system, measured at 245 Mev (solid lines), are in Fig. 2 compared with data from Ref. 8 ( $E_\pi = 290$  Mev)(broken lines). It is noted that the results obtained at 245 Mev do not essentially differ from those obtained at 290 Mev. Numerical results:

	245 Mev	290 Mev
$\theta_{\pi^+\pi^-}^*, \text{deg}$	$103 \pm 7$	$116.7 \pm 2.4$
$\theta_{\pi^+n}^*, \text{deg}$	$125 \pm 7$	$113.4 \pm 2.5$
$\theta_{\pi^-n}^*, \text{deg}$	$131 \pm 5$	$129.3 \pm 2.4$

V. P. Dzhelepov and L. I. Lapidus are thanked for their interest in the work. There are 2 figures and 8 references: 4 Soviet and 4 US.

ASSOCIATION: Ob"yedinemnyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

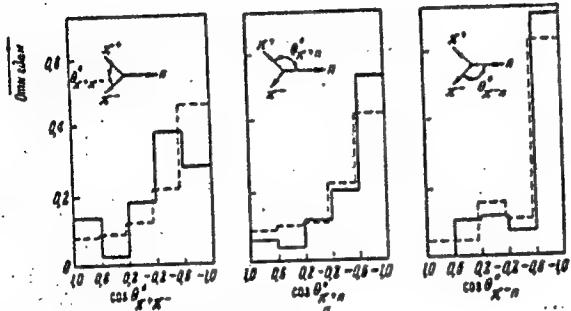
Card 2/4

88467

Production of Charged Mesons by 245-Mev  
 $\pi^-$  Mesons on Hydrogen

S/056/60/039/006/060/063  
B006/B063

SUBMITTED: October 1, 1960

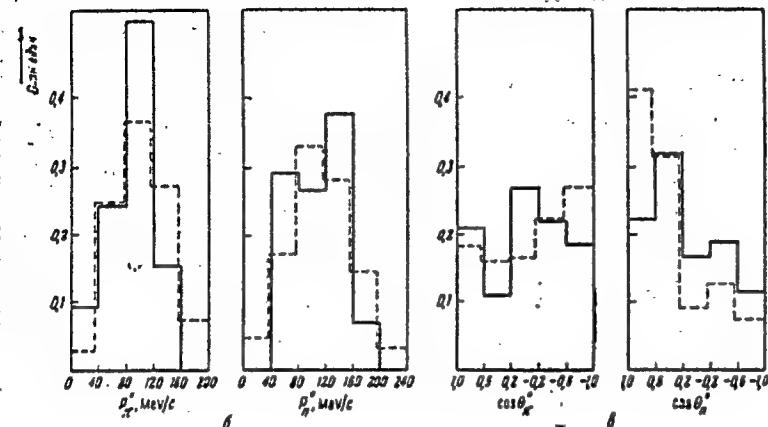


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Card 3/4

88467

S/056/60/039/006/060/063  
B006/B063



Card 4/4

3/056/61/040/002/011/047  
B102/B202

AUTHORS: Batusov, Yu. A., Bunyatov, S. A., Sidorov, V. M., Yarba,  
V. A.

TITLE: Production of charged mesons by 290-Mev  $\tau^-$  mesons in  
hydrogen

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 40,  
no. 2, 1961, 460-463

TEXT: The present paper is the continuation of a previous paper (Ref. 1:  
DAN SSSR, 133, 52, 1960), in which the authors studied the momentum and  
angular distributions of secondary particles of the reaction  $\pi^+ p \rightarrow \pi^+ \pi^- + n$ .  
In the present paper, the authors present the results of an analysis of 250  
events of this reaction at a meson energy of  $(290 \pm 15)$  Mev. The studies were  
made at the synchrocyclotron of the laboratoriya yadernykh problem OIYaI  
(Laboratory of Nuclear Problems of the OIYaI) by means of a photo-emulsion  
chamber. The measured momentum and angular distributions were compared with  
those obtained by the statistical Fermi theory and the model of Lindenbaum -  
Sternheimer. Calculations were made by the method of "random stars" and an

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S/056/61/040/002/011/047  
B102/B202

Production of ...

electronic computer. The mean accuracy of the theoretical histograms is approximately 5%. Results are illustrated in figures. A comparison of the diagrams shows that no quantitative agreement with the experiment can be obtained although the statistical theory and the isobaric model correctly reproduce the characteristic features of the spectra. E. g., the maximum of the neutron spectrum (Fig. 1) was found to be shifted toward smaller momenta. The angular distribution (angle between secondary pions - Fig. 2) indicates that the mesons probably depart at larger angles than those found theoretically. The mean angles of emission are the following:

	experiment	statistical theory	isobaric model
$\bar{\theta}_{\pi^+ p^-}^*$	$116.7 \pm 2.4$	102.2	98.1
$\bar{\theta}_{\pi^+ n}^*$	$113.4 \pm 2.5$	128.6	123.9
$\bar{\theta}_{\pi^- n}^*$	$129.3 \pm 2.4$	129.4	141.0

Fig. 3 shows the angular distribution of secondary particles with respect to the direction of the primary meson; these experimental distributions can be

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S/056/61/040/002/011/047  
B102/B202

Production of ...

explained neither by the statistical theory nor by the isobaric model. It has been shown earlier (ZhETF, 39, 506, 1960) that the distribution with respect to relative momenta of secondary particles is in agreement with the theoretical distribution calculated by A. A. Ansel'm and V. N. Gribov. In this connection, the authors assumed the production of an additional meson near the threshold. On the basis of this theory and by taking account of the interaction of particles in the final state, better agreement with the experiments can be obtained also at these energies. Using the matrix elements  $S^2 = 1 + ck_{12} + dk_{13}$  the following values are obtained for the mean angles of emission between the secondary particles (calculated according to G. I. Kopylov):  $\bar{\theta}_{\pi^+\pi^-}^* = 109.0^\circ$ ;  $\bar{\theta}_{\pi^-\pi^+}^* = 119.0^\circ$ ;  $\bar{\theta}_{\pi^-\pi^-}^* = 131.0^\circ$ . This is in good

agreement with the experiment. The authors thank Professor V. P. Dzhelepov and L. I. Lapidus for their interest, and G. I. Popov for assistance and discussions. There are 3 figures and 5 Soviet-bloc references. ✓

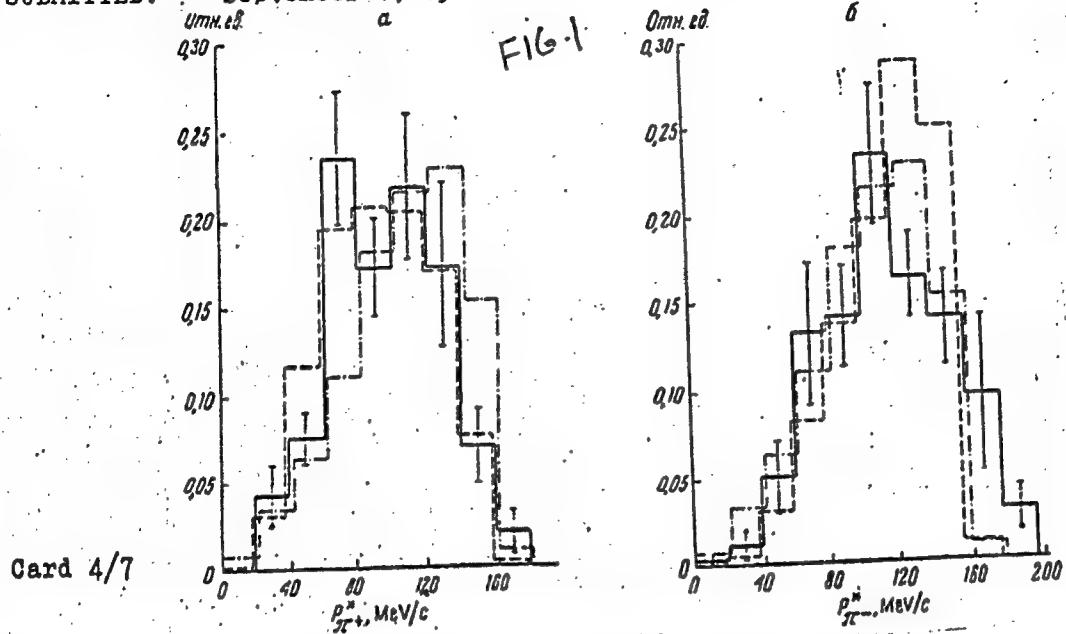
ASSOCIATION: Ob"yedinennyi institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

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Production of ...

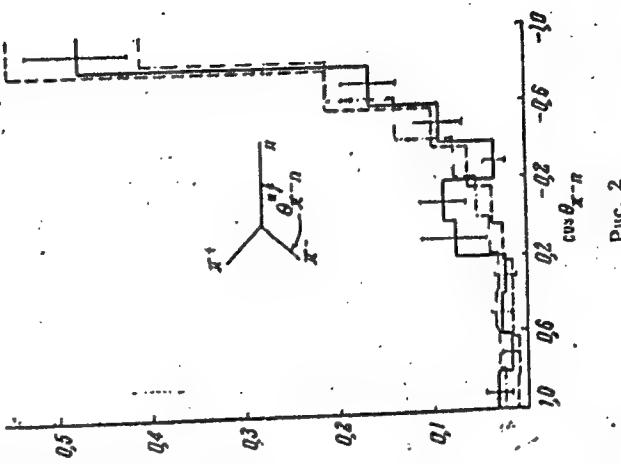
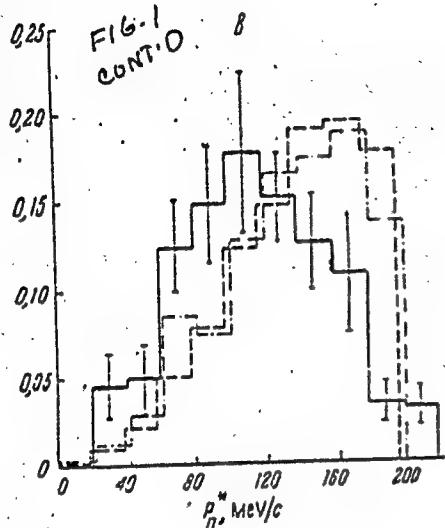
SUBMITTED: September 1, 1960

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B102/B202

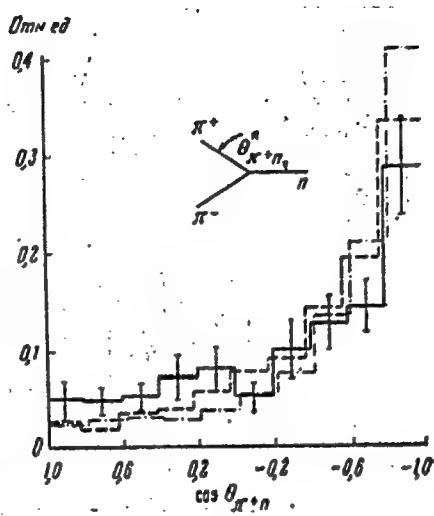
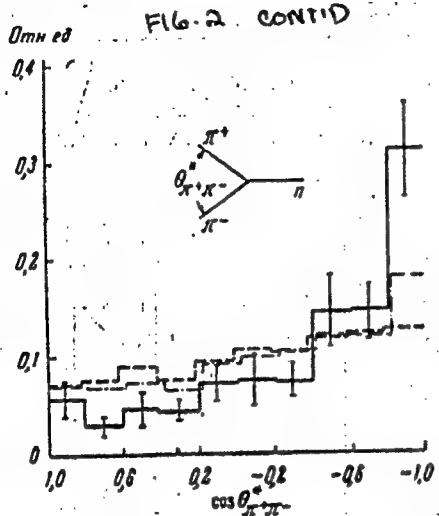
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Production of ...

Fig. 2. CONT'D



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Production of ...

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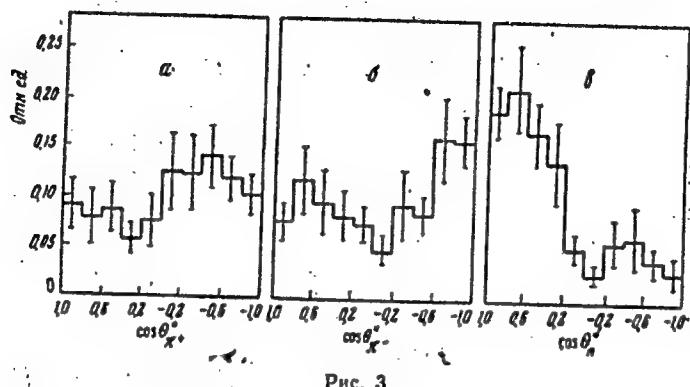


Fig. 3

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*YARBA, V. N.*

BATUNOV, Yu. A., JUNYATOV, S. A., SIDOROV, V. N. and YARBA, V. A.

"The Reaction  $\pi^+ + p \rightarrow \pi^+ + \pi^- + n$  at 210-310 Mev and  $\pi^+ \pi^-$ -Interaction"

report presented at the Intl. Conference on High Energy Physics, Geneva,  
4-11 July 1962

Joint Institute for Nuclear Research  
Laboratory of Nuclear Problems

1. On "yedineniyyi" instint yadernyykh issledovaniy. (Mesons)  
(Muclear reactions) (Protons) (MIRA 14:7)  
40 no. 5:1528-1530 My 161.  
Tl-N->Tl-N at an energy of 290 Mev. Zhur. eksp. i teor. fiz. 112.  
Tl-interaction and the cross-sections-ratio of the reactions  
BATUsov, Yu.A.; BUNATOV, S.A.; SIDOROV, V.M.; VARFA, V.A.

S/056/62/043/006/C07/067  
B184/B102

AUTHORS: Batusov, Yu. A., Bunyatov, S. A., Sidorov, V. M., Yarba, V. A.

TITLE: The reaction  $\pi^- + p \rightarrow \pi^+ + \pi^- + n$  at energies of 240 Mev and  $\pi\pi$ -interaction

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,  
no. 6(12), 1962, 2015-2018

TEXT: The reaction  $\pi^- + p \rightarrow \pi^+ + \pi^- + n$  was studied in a photoemulsion chamber at a mean primary pion energy of  $240 \pm 15$  Mev. The mass spectrum of the  $\pi^+\pi^-$  system was taken in the interval between 280 and 350 Mev. Out of the 255 events chosen (selection method in DAN SSSR, 133, 52, 1960) both pions came to rest in 85% of the events; their energy was determined from the track; in the remaining 15% the meson left the chamber. Its energy was determined from the ionization. The measurement accuracy of the mass of the  $\pi^+\pi^-$  system was 1.5-3.0 Mev. As compared with the phase volume of all events recorded in the chamber, the experimentally determined mass spectrum is shifted systematically to the side of the higher mass values. If the experimental data are divided by the phase volume at the corresponding points it follows that the matrix element increases with increasing energy.

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S/056/62/043/006/007/067  
B184/B102

The reaction  $\pi^- + p \rightarrow \pi^+ + \pi^- + n...$

of the  $\pi^+\pi^-$  system and that it does not coincide with the phase volume. The deviation of the mass spectrum from the random distribution is ascribed to the interaction of the pions in the final state. No resonant-type anomalies could be observed in the mass spectrum of the  $\pi^+\pi^-$  system within the measurement accuracy in the interval between 280 and 350 Mev. Hence the upper limit of the total production cross section of the ABC meson with the mass  $300 \pm 10$  Mev does not exceed  $10^{-29} \text{ cm}^2$  in the reaction (1). In the reaction  $p + d \rightarrow \text{He}^3 + \pi^+ + \pi^-$  the deviation of the experimental spectrum of the  $\text{He}^3$  nuclei from the 3-particle phase volume is assumed to be due to a dependence of the matrix element of this reaction on the mass of the  $\pi^+\pi^-$  system. Also in this reaction, no resonant-type anomalies were observed. Hence the authors conclude that the anomaly is not caused by the formation of a new particle or of a resonance. There are 3 figures.

ASSOCIATION: Ob'yedinenyyi institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: June 30, 1962

Card 2/2

BATUSOV, Yu.A.; BUNYATOV, S.A.; DO IN SEB; SIDOROV, V.M.; YARBA, V.A.

[Use of the Chew-Low method in studying the  $(\pi^+ - \pi^-)$ -interaction at low energies] Issledovanie  $(\pi^+ - \pi^-)$ -vzaimodeistviia pri nizkikh energiakh metodom Chu i Lou. Dubna, Ob"edinennyi in-t iadernykh issledovanii, 1963. 11p.

(MIRA 16:6)

(Nuclear reactions)

BATUSOV, Yu.A.; BUNYATOV, S.A.; DO IN SEB; SIDOROV, V.M.; YARBA, V.A.

Use of Chew and Low's method in studying  $\pi^+ \pi^-$ -interactions  
at low energies. Zhur. eksp. i teor. fiz. 45 no.4:913-920 O  
'63. (MIRA 16:11)

1: Ob"yedinennyj institut yadernykh issledovaniy.

ACCESSION NR: AP4009103

S/0056/63/045/006/1835/1838

AUTHORS: Oganesyan, K. O.; Yarba, V. A.

TITLE: Spectra of charged mesons from np collisions, emitted at 90°, at approximate neutron energy 600 MeV

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 45, no. 6, 1963, 1835-1838

TOPIC TAGS: np collision, charged meson emission, charged pion emission, pion spectrum, charged pion spectrum, charged meson spectrum, magnetic spectrometer measurement, emulsion measurement, pion yield ratio

ABSTRACT: In order to provide an independent check on the results obtained with the aid of a magnetic spectrometer (V. Dzhelepov, V. Kiselev, K. Oganesyan, and V. Flyagin, Proc. Intern. Conf. on High-Energy Physics at Rochester, 1960), the energy spectra of

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ACCESSION NR: AP4009103

charged meson at 90° (in the laboratory system), from the reaction  $n + p \rightarrow \pi^+ + \dots$  with  $\sim 600$  MeV neutrons were measured with the aid of an emulsion stack. The ratio of the positive to negative pion yields was found to be  $0.94 \pm 0.10$ . The results obtained, which agree with those yielded by the magnetic spectrometer, are compared with those of other researchers and are found to agree with the resonance model of meson production developed by Mandelstam (Proc. Roy. Soc. v. A244, 491, 1958). "The authors are grateful to Prof. V. P. Dzhelepov for a useful advice and remarks and to L. I. Lapidus and V. M. Sidorov for a discussion of the results." Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Ob"yedinenny\*y institut yaderny\*kh issledovaniy  
(Joint Institute of Nuclear Research)

SUBMITTED: 18Jun63

DATE ACQ: 02Feb64

ENCL: 01

SUB CODE: PH

NO REF SOV: 005

OTHER: 006

Card 2/32

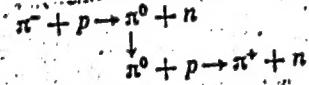
ACCESSION NR: AP4019256

8/0056/64/046/002/0817/0818

AUTHORS: Batusov, Yu. A.; Bunyatov, S. A.; Sidorov, V. M.; Yarba,  
V. A.

TITLE: Double charge exchange of positive pions

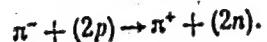
SOURCE: Zhurnal eksper. i teor. fiz., v. 46, no. 2, 1964, 817-818

TOPIC TAGS: Pion, Pi meson, positive pion, charge exchange, double  
charge exchange, positive pion charge exchange, secondary positive  
pion, emulsion techniqueABSTRACT: The production of a positive pion in collisions between  
negative pions and nuclei, by double charge exchange, via the reac-  
tions

Card 1/3

ACCESSION NR: AP4019256

or



which is difficult to separate in pure form and which yield additional information on the interaction between charged neutral mesons with nucleons in complex nuclei, has been investigated by exposing a pellicle stack ( $Z = 21$ ) in a synchrocyclotron to a beam of 80-MeV positive pions. The pellicles were scanned for the secondary pions produced as energies much lower than the meson production threshold, for only then could the positive pions be produced by double charge exchange. The cross section obtained for double charge exchange at 30-80 MeV was  $(5 \pm 1) \times 10^{-28} \text{ cm}^2$ . There was no double charge exchange for 0-30 MeV primary pions. "The authors are grateful to Prof. V. P. Dzhelepov for a discussion of the results and to V. I. Petrukhin for help in the irradiation of the pellicle stacks."

Orig. art. has: 4 formulas.

Card 2/3

ACCESSION NR: AP4019256

ASSOCIATION: Ob"yedinenny\*y institut yaderny\*kh issledovaniy  
(Joint Institute of Nuclear Research)

SUBMITTED: 04Dec63 DATE ACQ: 27Mar64 ENCL: 00

SUB CODE: PH NO REF SOV: 001 OTHER: 001

Card 3/3